

Remarks

Applicants submit the following remarks in support of the patentability of the presently claimed invention over the disclosures of the references relied upon by the Examiner in rejecting the claims. Further and favorable reconsideration is respectfully requested in view of these remarks.

Initially, claim 1 has been amended to use more conventional terminology according to U.S. practice, by changing "characterized in that" to --which comprises polymerizing--, and also changing "is polymerized with use" to --in the presence--.

Furthermore, although claim 6 is an independent claim, it does not define formulae (1) and (2). Accordingly, claim 6 has been amended to incorporate the definitions for these formulae from claim 1.

The rejection of claims 1-6 and 13-27 under 35 U.S.C. §102(a) as being anticipated by Yamago et al. ("Tailored Synthesis of Structurally Defined Polymers by Organotellurium-Mediated Living Radical Polymerization", Journal of American Chemical Society, 2002, 124, 13666-13667), is respectfully traversed.

Applicants take the position that this reference, which was published on the Web October 23, 2002 (less than one year prior to the filing date of the PCT application on which the present U.S. application is based), is not available as prior art against the present invention. This reference names the two inventors named in the present application as coauthors, along with Kazunori Iida as a third coauthor. However, Kazunori Iida was not an actual inventor of any of the subject matter disclosed in this Yamago et al. reference, and in support of this, attention is directed to the attached Declaration of Kazunori Iida. For this reason alone, the rejection of the present claims based on this reference should be withdrawn.

The rejection of claims 1-6 and 13-27 under 35 U.S.C. §103(a) as being unpatentable over Yamago et al. ("Organotellurium Compounds as Novel Initiators for Controlled/Living Radical Polymerizations. Synthesis of Functionalized Polystyrenes and End-Group Modifications", Journal of the American Chemical Society, 124 (12), 2874-2875, 2002.02.27) in view of Leonard et al. (U.S. 4,124,633), is respectfully traversed.

This Yamago et al. reference discloses living radical polymerization of styrene using an organotellurium compound.

Leonard et al. disclose a process for the preparation of acrylic acid or methacrylic acid which comprises catalytically decomposing the corresponding unsaturated intermediate peroxide compounds peracrylic acid and acrolein monoperacrylate or permethacrylic acid and monopermethacrylate contained in an oxidate solution in the presence of the oxidate reaction mixture of a tellurium catalyst, wherein the oxidate solution is derived from the liquid phase autoxidation of acrolein or methacrolein, and recovering the acrylic or methacrylic acid.

Thus, Leonard et al. employ **peracrylic acid** or **permethacrylic acid** which are peroxide compounds, and do not disclose **polyacrylic acid** or **polymethacrylic acid**, i.e. this reference in no way teaches polymerization of a vinyl monomer.

Accordingly, Applicants take the position that one of ordinary skill in the art would not be motivated to combine the Yamago et al. reference with the Leonard et al. reference, since the Yamago et al. reference is concerned with polymerization of a vinyl compound, whereas the Leonard et al. reference is concerned with preparation of acrylic acid or methacrylic acid.

Furthermore, the Yamago et al. reference does not disclose living radical polymerization of acrylate monomer using an organotellurium compound.

On the other hand, the present invention can provide living radical polymerization of acrylate monomer in addition to polymerization of styrene with precision control of molecular weight and molecular weight distribution ($PD=M_w/M_n$) under mild conditions.

For these reasons, Applicants take the position that the presently claimed invention is clearly patentable over the applied references.

Therefore, in view of the foregoing remarks, it is submitted that the present application is now in condition for allowance. Such allowance is solicited.

Respectfully submitted,

Shigeru YAMAGO et al.

By:

A handwritten signature in black ink, appearing to read "Michael R. Davis", is written over a horizontal line.

Michael R. Davis
Registration No. 25,134
Attorney for Applicants

MRD/pth
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
December 22, 2006